CLAIM LISTING

A listing of the entire set of claims 1-54 is submitted herewith per 37 CFR 1.121. This listing of claims 1-54 will replace all prior versions, and listings, of claims in the application.

1-27 (Cancelled)

28. (Previously Presented) A method of controlling an operation of a switched-reluctance motor including a rotor having a rotor pole and a stator having a stator pole, said method comprising:

aligning the rotor pole and the stator pole in response to a reception of an actuation command: and

subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation of the rotor to a holding position.

29. (Previously Presented) The method of claim 28, further comprising:

rotating the rotor to the holding position upon an expiration of the predetermined time period.

30. (Previously Presented) The method of claim 29, further comprising:

minimizing any current losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position.

31. (Previously Presented) The method of claim 29, further comprising:

minimizing any heating losses of the switched-reluctance motor subsequent to rotating the rotor the holding position.

32. (Previously Presented) A method for controlling an alignment of a rotor pole and a stator pole of a switched-reluctance motor, said method comprising:

identifying a first phase of the motor as a target phase defining an initial position of the rotor pole that corresponds to the alignment of the rotor pole and stator pole; and

subsequent to identifying the first phase of the motor as the target phase, exclusively exciting a second phase of the motor and the first phase of the motor in a sequential manner to thereby rotate the rotor pole to the initial position, the second phase being adjacent the first phase.

33. (Previously Presented) A method for controlling an alignment of a rotor pole of a switched reluctance motor to a target position between a first phase of the motor and a second phase of the motor, said method comprising:

aligning the first phase of the motor to thereby align the rotor pole to a stator pole adjacent the target position; and

subsequent to aligning the first phase of the motor, concurrently exciting a third phase of the motor and a fourth phase of the motor to hereby align the rotor pole to the target position.

34. (Previously Presented) A method for controlling a rotation of a rotor of a switched-reluctance motor in a desired direction from pre-alignment position, said method comprising:

cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner to thereby crank the rotor in the desired direction from the pre-alignment position; and

subsequent to cyclically exciting a plurality pf phases of the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position.

35. (Previously Presented) A method for controlling a minimization of any heat losses by a switched-reluctance motor having a rotator in a holding position, said method comprising:

rotating the rotor from a pre-alignment position to the holding position; and

dithering the rotor upon the rotor being in the holding position for a predetermined time period.

36. (Previously Presented) A method for controlling a minimization of any current losses by a switched-reluctance motor having a rotator in a holding position, said method comprising:

rotating the rotor from a pre-alignment position to the holding position; and

subsequent to rotating from a pre-alignment position to the holding position, reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position.

37. (Previously Presented) A device of controlling an operation of a switched-reluctance motor including a rotor having a rotor pole and the stator having a stator pole, said device comprising:

means for aligning the rotor pole and the stator pole in response to a reception of an actuation commend; and

means for subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation of the rotor to a holding position.

38. (Previously Presented) The device of claim 37, further comprising:

means for rotating the rotor to the holding position upon an expiration of the predetermined time period.

39. (Previously Presented) The device of claim 38, further comprising:

means for minimizing any current losses of the switch-reluctance motor subsequent to rotating the rotor to the holding position.

40. (Previously Presented) The device of claim 38, further comprising:

means for minimizing any heating losses of the switch-reluctance motor subsequent to rotating the rotor to the holding position.

41. (Previously Presented) A device for controlling an alignment of a rotor pole and a stator pole of a switched-reluctance motor, said device comprising:

means for identifying a first phase of the motor as a target phase defining an initial position of the rotor pole that corresponds to the alignment of the rotor pole and the stator pole; and

means for subsequent to identifying the first phase of the motor as the target phase, exclusively exciting a second phase of the motor and the first phase of the motor in a sequential manner to thereby rotate the rotor pole to the initial position, the second phase being adjacent the first phase.

42. (Previously Presented) A device for controlling an alignment of a rotor pole of a switched-reluctance motor to a target position between a first phase of the motor and a second phase of the motor, said device comprising:

means for aligning the fist phase of the motor to thereby align the rotor pole to a stator pole adjacent the target position; and

means for, subsequently to aligning the first phase of the motor, concurrently exciting a third phase of the motor and a fourth phase of the motor to thereby align the rotor pole to the target position.

43. (Previously Presented) A device for controlling a rotation of a rotor of a switched-reluctance motor in a desired direction from a pre-alignment position, said device comprising:

means for cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner to thereby crank the rotor in the desired direction from the pre-alignment position; and

means for, subsequently to cyclically exciting a plurality of phases to the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position.

44. (Previously Presented) A device for controlling a minimization of any heat losses by a switched-reluctance motor having a rotor in a holding position, said device comprising:

means for rotating the rotor from a pre-alignment position to the holding position; and

means for dithering the rotor upon the rotor being in the holding position for a predetermined time period.

45. (Previously Presented) A device for controlling a minimization of any current losses by a switched-reluctance motor having a rotor in a holding position, said device comprising:

means for rotating the rotor from a pre-alignment position to the holding position; and

means for, subsequent to rotating the rotor from the pre-alignment position to the holding position reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position.

46. (Previously Presented) A system, comprising:

a switched-reluctance motor including

a rotor having a rotor pole, and

a rotor having a stator pole;

means for aligning the rotor pole and the stator pole in response to a reception of an actuation command; and

means for, subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation to a holding position.

47. (Previously Presented) The system of claim 37, further comprising:

means for rotating the rotor to the holding position upon an expiration of the predetermined time period.

48. (Previously Presented) The system of claim 47, further comprising:

means for minimizing any current losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position.

49. (Previously Presented) The system of claim 47, further comprising:

means for minimizing any heating losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position.

50. (Previously Presented) A system comprising:

a switched-reluctance motor including

a rotor have a rotor pole, and

a stator having a stator pole;

means for identifying a first phase of the motor as a target phase defining an initial position of the rotor pole that corresponds to the alignment of the rotor pole and the stator pole; and

means for, subsequent to identifying the first phase of the motor as the target phase, exclusively exciting a second phase of the motor and the first phase of the motor in a sequential manner to thereby rotate the rotor pole to the initial position, the second phase being adjacent the first phase.

51. (Previously Presented) A system, comprising:

a switched-reluctance motor including

a rotor having a rotor pole, and

a stator having a stator pole;

means for aligning a first phase of the motor to thereby align the rotor pole to the stator pole adjacent a target position between a first phase of the motor and a second phase of the motor; and

means for, subsequently to aligning the first phase of the motor, concurrently exciting a third phase of the motor and a fourth phase of the motor to thereby align the rotor pole to the target position.

52. (Previously Presented) A system, comprising:

a switched-reluctance motor including a rotor;

means for cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner to thereby crank the rotor in the desired direction from a pre-alignment position; and

means for, subsequently to cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position.

53. (Previously Presented) A system, comprising:

a switched-reluctance motor including a rotor;

means for rotating the rotor from a pre-alignment position to a holding position; and

means for dithering the rotor upon the rotor being in the holding position for a predetermined time period.

54. (Previously Presented) A system, comprising:

a switched-reluctance motor including a rotor;

means for rotating the rotor from a pre-alignment position to a holding position; and

means for, subsequent to rotating the rotor from the pre-alignment position to the holding position, reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position.